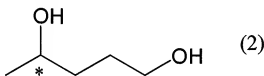


AMENDMENTS TO THE CLAIMS

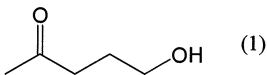
This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A process for producing an optically active 1,4-pentanediol represented by formula (2):



(wherein * represents an asymmetric carbon atom) comprising asymmetrically reducing 5-hydroxy-2-pentanone represented by formula (1):



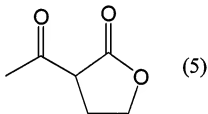
wherein said asymmetric reduction of 5-hydroxy-2-pentanone represented by formula (1) is catalyzed by an enzyme comprising the amino acid sequence of the reducing enzyme encoded by a vector selected from the group consisting of: pNTS1G of *Escherichia coli* HB101 (pNTS1G)(FERM BP-5835); pNTFPG of *Escherichia coli* HB101 (pNTFPG)(FERM BP-7117); pNTDRG1 of *Escherichia coli* HB101 (pNTDRG1)(FERM BP-08458); pNTRS of *Escherichia coli* HB101 (pNTRS)(FERM BP-08545); or pNTRGG1 of *Escherichia coli* HB101 (pNTRGG1)(FERM BP-7858).

2-5. (canceled).

6. **(previously presented):** The process according to claim 1, wherein the asymmetric reduction of 5-hydroxy-2-pentanone represented by formula (1) is catalyzed by an enzyme comprising the amino acid sequence of the reducing enzyme encoded by pNTRS of *Escherichia coli* HB101 (pNTRS) (FERM BP-08545), or pNTRGG1 of *Escherichia coli* HB101 (pNTRGG1) (FERM BP-7858).

7-9. **(canceled).**

10. **(previously presented):** The process according to claim 1, wherein 5-hydroxy-2-pentanone represented by said formula (1) produced by hydrolyzing 2-acetyl- γ -butyrolactone represented by formula (5):



in the presence of an acid is used as a starting material.

11-15. **(canceled).**